

Appendix H: Data Collection and Evaluation Tools

Exhibit A: Agenda

Agenda

8:30 – 8:45	Wait for late arrivals and introduce the Agenda
8:45 – 9:15	Torrance Test of Creativity
9:15 to 9:30	Introduce Presentation Development Task
9:30 to 11:30	Work on Presentation Development Task
11:30 to 12:15	Group A (15 students) has lunch / Group B Group Problem Solving Task
12:15 to 1:00	Group B (15 students) has lunch / Group A Group Problem Solving Task
1:00 to 2:30	Work on Presentation Development Task

At 2:30 the two groups will split into 8 groups as indicated in the table below.

Activity	2:30 – 2:50	2:55 – 3:15	3:20 – 3:40	3:45 – 4:05	4:10 – 4:30	4:35 – 4:55
Oral Presentations	Group A1	Group A2	Group A3	Group B1	Group B2	Group B3
Break	Group A2	Group A1	Group B1	Group A3	Group B3	Group B2
Content Test	Groups A3 & B1		Groups B2 & B3		Groups A1 & A2	
Formal Reasoning Test	Groups B2 & B3		Groups A1 & A2		Groups A3 & B1	

Exhibit B: Student Instructions for Presentation Task

III Structured Presentation Task Student Instructions

The primary task that the high school students in both conditions were asked to perform was the following:

Working independently and using only online resources develop a ten-minute presentation designed to inform parents whose child has just been diagnosed with autism about the disease. You will have three and a half hours to develop your report, two hours before lunch and an hour and a half after lunch. You can take breaks whenever you want, but please sign in and out, and stay in the designated areas. At the end of the day, you will take three short tests and one short survey, and you will deliver your presentation, which will be videotaped. If you like, you can deliver your presentation using a computer, which will be connected to a projector so that your audience can see it. You will be done and ready to go home by 4:30. You are not to contact any other students as you work on this project, by any means, and when we break for lunch, the project and the topic of Autism are not to be discussed. If you violate these simple restrictions, you will be eliminated from the study.

At the elementary and middle school level the assignment was the following:

Working on your own, and using only resources you can find on the computer, develop a ten-minute presentation designed to inform people about the planet Mars. You will have three and a half hours to develop your report, two hours before lunch and an hour and a half after lunch. You can take breaks whenever you want, but please ask the teacher for permission to leave the room. At the end of the day, you will take three short tests and one short survey, and you will deliver your presentation, which will be videotaped. If you like, you can deliver your presentation using a computer, which will be connected to a projector so that your audience can see it. You will be done and ready to go home by 4:30. You are not to talk to any other students while you work on this project, in person, on the phone, or in any other way, and when we break for lunch, the project and the topic are not to be discussed. If you violate these simple rules, you will be eliminated from the study.

Exhibit C: Group Problem solving Task Instructions

(Given to each student in writing and read by the Task Leader)

- You will have 10 minutes to complete this problem.
- You are to build a structure of toothpicks and clay that will sit on a table behind a boundary line. The structure will cantilever, or stick out, as far as possible beyond the boundary line without touching the table surface.
- You may work anywhere you wish. You may also talk.
- You may break the toothpicks into smaller pieces if you wish.
- If your structure touches the table surface, you must break it off until it is cantilevered.
- The structure will be measured after the 10-minute construction period. The distance cantilevered will determine your score.
- You will be given 50 toothpicks and a piece of clay. The clay will be used to make the joints for your structure.
- The team must rest the structure on the table behind the boundary line. You may not press down so that the clay adheres to the table to support the cantilever.
- Scoring will be as follows: You will score one point for each 1/4" the structure extends beyond the boundary line without touching the surface. The end of the cantilever must be above the yardstick when the judge takes the final measurement.

Exhibit D: Oral Presentation – Content Criteria Summary

This Appendix also offers three tools developed by Analysis Team. The Rubric Development Team tasks were separate, and occurred before, the actual tasks of the Performance Evaluation Team. These tools were developed using a random sample of 18 cases (students) from both the treatment and the control sites. Tested repeatedly by the team, which consists of experts in the field of qualitative research, we firmly believe that these tools are appropriate and effective tools to engage the analysis of both the performance and the group problem solving cases. There are four exhibits in this Appendix.

[illegible]

Exhibit E: Oral Presentation - Rubric

CFF 2008 21st Century Skills - III-Structured Presentation Rubric					
Overall Holistic Assessment of Presentation Quality		Excellent	Good	Fair	Poor
	Criteria	4	3	2	1
PRESENTER	1a. Presentation Skills (Eye Contact)	Student generally maintains eye contact w/audience.	About half the time the student maintains eye contact w/audience.	Student makes sporadic eye contact w/audience.	Student makes no eye contact w/audience.
	1b. Presentation Skills (Body language)	Student is generally poised and confident, attending to the audience.	Student is somewhat poised and confident, most always attending to the audience.	Student is not poised or rarely attends to the audience.	Student is very nervous , or does not attend to the audience.
	1c. Presentation Skills (Voice)	Student speaks clearly and is easily understandable.	Student speaks somewhat clearly making an occasional mistake.	Student's voice is somewhat nervous , occasionally stumbling on words or voice falters.	Student's voice shows a great deal of stress and is difficult to understand.
	1d. Relationship between Visual and Spoken Content	The presenter often expanded on content on the slides/notes.	The presenter at times expanded on content on the slides/notes.	The presenter rarely expanded on content on the slides/notes.	The presenter never expanded on content on the slides/notes.
PRESENTATION	2a. Organization of the Oral Report	Student presents information in logical, interesting sequence which audience can easily follow.	Organization of the content is acceptable , but not optimal.		The presentation is disorganized , presenting content in what might be a random sequence.
	2b. Coverage of the Content	Student covered the topic well, including 76% or more of the content topics.	Student covered the topic fairly well, including 51 to 75% of the content topics.	Student covered the topic marginally, including 26 to 50% of the content topics.	Student covered the topic poorly, including 0 to 25% of the content topics.
	2c. Quality of Content	All information appeared to be accurate.	Almost all of the information appeared to be accurate.		Three or more statements appeared to be inaccurate.
	2d. Quality of Sources	All sources used for the content were from reliable sources.	Some of the sources used for content were from reliable sources.	Few of the sources used for content were from reliable sources.	None of the sources used for content were from reliable sources.
	2e. Number of Sources (enter total number on scoring sheet)				
	2f. Mechanics (Spelling/grammar)	Presentation has no misspellings or grammatical errors.	Presentation has a few misspellings or grammatical errors.	Presentation has more than a few misspellings or grammatical errors.	Presentation has many misspellings and/or grammatical errors.
	2g. Use of Images	Images contributed significantly to explain or reinforce the content.	Images contributed somewhat to explain or reinforce the content.	Images were used in a decorative way and did not contribute to the content.	No images were used.
	2h. Artistic Choices	Use of fonts, color, slide design, and formatting contributed significantly to enhance presentation.	Use of fonts, color, slide design, and formatting contributed somewhat to enhance presentation.	Use of fonts, color, slide design, and formatting occasionally detracted from content.	Use of fonts, color, slide design, and formatting, often detracted from the content or no formatting was used.

Exhibit F: Group Problem Solving Task - Checklist

This checklist is for assessing the quality of teamwork and creativity in a group setting. The task was videotaped and scored by blind reviewers using this tool. The last section scores the product itself (the tower) by giving one point for each ¼ inch the structure cantilevers past the boundary line.

Instructions: Place a hash mark in the appropriate square for one instance of the observation. If more entries are needed, make a second check mark. Repeat with additional checks. Complete one rubric for each group, combining the actions of all team members.

PART I. Group ID: _____

Top of Form

PROCESS	Student 1	Student 2	Student 3	Student 4	Student 5	Student 6	Totals
1. LEADERSHIP SKILLS							
Solicits / encourages participation of others or asks a question relating to task							
Offers suggestions to others to complete task							
2. TEAMWORK SKILLS							
Contributes an idea / proposes new approach							
Supports the idea of another/gives positive feedback or comments							
3. CREATIVE PROBLEM SOLVING							
Restates/summarizes the problem /reflects on the task							
Total Points							

PRODUCT	
1. CANTILEVER	
Scoring Cantilever Structure - 1 pt. for each ¼" cantilever beyond the boundary.(Enter inches and points total—each inch = 4 points.)	<div style="border-bottom: 1px solid black; padding-bottom: 5px;">Cantilever Points</div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;">Inches =</div>